ABE_150

PUMP FOR AIR QUALITY MONITORING

User Manual

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Kind costumer,

Before to use taib pump, we maintains you to attentively read this manual!
It contain warnings and important data, that, if you will observe, you will assure the instruments availability and some savings on costs. In this way, the use of this instrument, will be easier and more durable.

Note

We advise you to contact our factory after to use the instrument for new application, for example in research and development.

1.1 General warnings

The products descript in this manual, has left the factory in a good and secure condition. It must be use in the way descript by producer. Then, the secure working of this product, presuppose that it has an appropriate transport, that the store and the install have made whit accuracy.

This manual contains information for a conformable use to employment estimated. It applies a qualified staff, which has received specific training.

If you wish others information, or if you have particular problems, that there isn't in this manual, you' ll have to ask necessary explanations to our factory.

1.2 Instructions to use this manual

In this manual there is the description how of put in service, use and make preservation of this instrument for air quality monitor.

We recommend to observe with particular attentions the **warnings and notes.**

1.3 Warnings

Warnings pertinent to security help to avoid risks for user's life and health or to avoid materials damages. In this manual this warnings are distinguished by signal's conception uninterruptedly definite. Then, they are marked by warnings symbols in the point that they are.

Danger

It mean that will verify death, heavy wounds to people and/or considerable damages to things, if don't take the precaution measures.

Warning

It mean that can verify death, heavy wounds to people and/or considerable damages to things, if don't take the precaution measures.

Attention

With triangular advise, it means that can happen light wounds if don't take the right precaution measures.

Attention

Without triangular advice. It means that can happen materials damages if don't take the right precaution measures.

Advise

It means that can happened unexpected problems if you don't observe correspondent advise.

1.4 Conformable utilization to estimated engagement

Product describe in this manual it was made, tested and documented whit observance to security laws now in use. If you'll respect manipulation rules, security, installation and preservation warnings, you won't have any problems. This instrument is made in way to guarantee secure isolation between primary and secondary electrical circuit.

Secure working, without errors, ask accurate transport and professional store, and also accurate preservation.

Advise

This instrument is electric. Before open case, some parts of this instrument are accessible, but that are parts in electrical voltage. So, only qualified staff can make some interventions on this instrument.

1.5 Qualified staff

Can verify in case of interventions not qualified on instruments or not observance of the warnings of this manual, heavy wounds to people and/or considerable damages to things. So, only qualified staff is authorized to make interventions on this instrument.

For qualified staff, in sense of security we intend:

- People that have familiarity with security concept in the automation's technique.
- People that were trained to use device of automation's technique and that know the contents of this manual.

- People who have a formation for repair this type of device.

1.6 Guarantee' s note

The content of this manual don't establish part of an agreement, promise or a juridical relation. All obligations by A.B. Energy S.r.l. resulted by buying and selling contract, witch contain also complete guarantee's discipline. These contractual arrangements for guarantee are not extended or limited by exposition of this manual.

1.7 Note

The respective dotation is report, conformed to valid buying and selling contract, on shipment documents enclosed to supply.

During the packing opening, we ask to observe the pertinent learning and warning reported on packing. Please, verify the integrity of supply.

Conserve packing for possible re-shipping.

1.8 Laws and arrangements

Where possible, for specification and production of this instrument, it was based on European laws.

In case of use of this product outside application sphere of this laws and arrangements, it must observe laws and arrangements of customer's Country.

1.9 Conformity declaration

Pump for air quality monitoring ABE 150 is conforming to following CE arrangements.

Pump for air quality monitoring ABE 150 is conform to request of CE 89/336/CEE direction "electro-magnetic compatibility".

Pump for air quality monitoring ABE 150 is conform to request of CE 89/336/CEE direction "low voltage".

According to the above-cited CE direction, the CE conformity declaration are conserved for competent authority in:

A.B.ENERGY S.R.L.
VIA AMENDOLA N.340
13836 COSSATO (BI)
ITALY

2.1 Security warnings

Warning

The product mustn't work in a place with risk of explosion. Mixture of explosive gas mustn't be collected.

If the sample gas inside the instrument contains inflammable components above their explosion limit, it must be take security measures with expert person.

Warning

During collecting of poisonous or aggressive gas, can happen that, for a defect of gas conducts, quantity of sample gas amass in the instrument. To anticipate an explosion or poisonous warning, the instrument must be wash with inactive gas.

2.2 Utilization instructions

- During the working it must be observe the admissible field of temperature.

3.1 Camp of application

The new model ABE_150 replaced the old model ABE_110 and ABE_120 not in production any more.

The new pump permits the collection of samples from many different industrial, commercial or other places: composting plants, refluent treatment plants, restaurants, fast-foods, chemical industries, refineries, landfill sites, etc. Typical uses of the collection of these samples are olfactometer measurements (with sensors or with panel testers) to verify the concentration of smells or contaminants, the efficiency of filters, the air emission entity, etc.

3.2 Principal characteristics

The system uses a membrane pump that permits the collection of samples even from collectors, filters, etc. In depression, up to a maximum of – 150mBar.

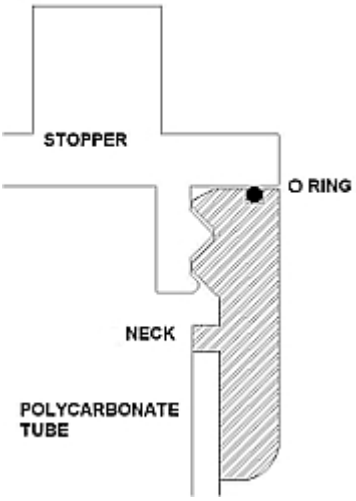
The main advantage of the ABE_150 pump is the total absence of contact between the sample gas and the pump, so the gas can't be contaminated. The plastic bag is filled by the depression in the tube.

Fast, easy and reliable system for the replacement of the bags through a right screw threaded seal that avoid any possible air leaks.

The model ABE_150 has a flow regulator, so you can change the bag filling time.

3.3 Structure and characteristic

The screw plug is done with pvc, very light and resistant material (it is inert to the nearly whole body of chemical compounds).



In respect of previous models, this version has improved system of screw of caps by a new thread with a 3 time more large passage.

ABE_150 includes a battery charger and 20 bags.

The long-life battery permits to fill a minimum of 250 bags before to recharge it: the filling time is lesser than 85 sec. – no matter about the depression value!

3.4 Charging the battery

To recharge the battery dell'ABE_150 use the supplied charger.

1) Connect the plug to a socket 230 VAC.

2) Insert the connector plug in the jack under the lower edge of the pump.

Such transactions must be conducted in a safe in the absence of dust or flammable gases.

The full recharge the battery case in a maximum of 6 hours.

3.5 Operating Instructions

1) Remove the top cover using the knobs

2) Place the bag inside the measuring chamber levy.

3) Remove the joint meeting, put the tube inside the bag and replace the joint.

4) Screw the lid until you get a perfect closure.

5) Press the Start button located under the lower lid, occurred close to filling the bag with a stopper (ABE_115).

6) Turn off the pump, remove the bag in reverse order, following steps 1 through 4.

3.6 Technical characteristics

Description	ABE150
Operative camp	Till –150 mBar
Bags filling time	Less then 85 sec.
Battery charger power supply	230Volt 50Hz 11.3W
Operating time	Up to 250 bags
Recharge time	6 hours
Operating temperature range	-5°C / 50°C
Weight	4,75 Kg
Dimensions	170*170*880 mm
Maximum depression	-300 mBar

4.1 Preservation works

After every utilization, verify the state of the case and if you find any damage, provide to the replace of the broken part.

Verify the state of nickel batteries and if they don’t arrive to the right charge (even if they were leave in charge for at least 6 hours), replace them.

If the pump made some noises, vibrations or anomalies, contact the provider for send the pump back for the repair of the product.

5.1 Price list

Code	Price	Description
ABE_150	€ 1500,00	With battery charge and 10 bags
ABE_111	€ 780,00	300 meters of bags
ABE_112	€ 60,00	Battery charger
ABE_113	€ 60,00	Supplementary battery pack for model ABE_150
ABE_114	€ 650,00	Spare membrane pump
ABE_115	€ 40,00	50 screw plugs

6.1 Re-shipping

The pump must be ship in the original packing. If you don't have the original packing, the instrument must be wrap up in a plastic film and then packing in a case dressed with anti-collision material.

In case of maritime transport, the instrument must be wrap up in a polytilene film 0,02mm thick. For this shimming mode, the case must be dressed with tarpaper.

On case of shipping in guarantee, please enclose the guarantee certified.

6.2 Address for re-shipping

Technical assistance

for technical assistance:

Tel: +39 015 9842253
Fax: +39 015 9233243
info@abenergy.it

Repairs

For a rapid cancel of damage causes, pleas send the instrument to the following address:

AB ENERGY S.R.L.
VIA AMENDOLA 340
13836 COSSATO (BI)
ITALY
Tel.: +39 015 9842253
Fax: +39 015 9233243

EC DECLARATION OF CONFORMITY

A.B.Energy S.r.L.

Via Amendola, 340 13836 COSSATO (BI) Italia

AS MANIFACTURER

DECLARE

UNDER OUR SOLE RESPONSABILITY

THAT EQUIPMENT OF SERIES ABE-600

AND RELATED ACCESSORIES,
TO WHICH THIS DECLARATION RELATES,
APPLIED UNDER CONDITION SUPPLIED IN THE USER'S MANUAL,
CONFORMS TO THE FOLLOWING STANDARDS OR NORMATIVE DOCUMENTS:

EN 61000-4-2 (1995-03)	Electromagnetic compatibility (EMC). Part 4: Testing and measurement techniques. Section 2: Electrostatic discharge immunity test. Basic EMC Publication.
EN 61000-4-3 (1996-09)	Electromagnetic compatibility (EMC). Part 4: Testing and measurement techniques. Section 3: Radiated, radio-frequency, electromagnetic field immunity test.
EN 61000-4-4 (1995-03)	Electromagnetic compatibility (EMC). Part 4: Testing and measurement techniques. Section 4: Electrical fast transient/burst immunity test. Basic EMC Publication.
EN 61000-4-6 (1996-07)	Electromagnetic compatibility (EMC). Part 4: Testing and measurement techniques. Section 6: Immunity to conducted disturbances, inducted by radio-freuquency fields.

FOLLOWING THE PREVOSIONS OF ELECTROMAGNETIC COMPATIBILITY DIRECTIVE

89/336/EEC AND SUBSEQUENT AMENDMENTS 92/31/EEC, 93/68/EEC AND 93/97/EEC.

LUOGO E DATA
Cossato, 04/05/2006

FIRMA
Andrea Ing. Baroni